Yosemite National Park

Yosemite Valley Shuttle Bus Procurement

National Park Service
U.S. Department of the Interior

Photo of an existing Yosemite Valley shuttle bus

Background

As called for in the *Yosemite Valley Plan,* a new fleet of low emissions, low noise, fuel efficient shuttle buses will be purchased to replace the existing fleet of 1986 diesel buses servicing Yosemite Valley.

What is the Yosemite Valley Shuttle Bus Procurement Project?

The National Park Service is intending to procure up to 19 new transit buses to replace the existing leased fleet of twelve 1986 diesel buses in its in-Valley shuttle system.

What criteria are being used to select the new bus fleet?

The *Yosemite Valley Plan* called for a replacement fleet that would use the best available fuel and propulsion systems designed for the special characteristics of travel within Yosemite Valley. The new fleet is expected to be fuel efficient, with low noise and low air pollutant emissions.

In order to maintain a positive visitor experience, the new fleet must provide sufficient capacity as well as allow passengers to get on and off the buses easily at the many stops. The new shuttle buses must also be able to handle the gentle grades on Valley roads, while providing cost-effective and reliable service.

What other characteristics will be considered?

The bus procurement project team is considering a number of options that would help visitors enjoy the grandeur of Yosemite Valley from every seat in a shuttle bus.

In order to ease getting passengers on and off the bus, the National Park Service is looking into low floor buses where the entrance to the bus would be near the curb height. This would prove extremely useful to those visitors with mobility impairments and to families traveling with small children.

Many visitors have also expressed a desire to be able to look up and have clear views outside the shuttle bus. In response, the project team is looking into vehicles that have operable skylights and windows that could be opened in the summer. This would allow for better viewing of Yosemite Valley's spectacular scenery while creating an open and airy atmosphere inside the bus.

What kinds of buses are being considered?

The National Park Service is currently working in cooperation with the U.S. Department of Transportation, private sector transportation experts, and the park's shuttle system operator (Yosemite Concession Services) to determine the best type of transit bus for the Yosemite Valley shuttle system. These vehicles will be expected to be in service for the next 10 to 15 years. Several types of alternative fuel buses have been considered and eliminated from consideration. The park is now focusing on hybrid electric buses fueled with a biodiesel blend.

Timeline

Release Request for Proposals to interested bus manufacturers:
December 2002

Contract Award to Manufacturer:
April 2003

Buses delivered:
Late 2004

Photo of an hybrid electric, low floor shuttle bus, like the type being considered for the Yosemite Valley shuttle bus fleet.

What is a diesel-electric hybrid bus?

Hybrid refers to a mix of power sources. A *diesel-electric* hybrid bus is powered by both diesel (or biodiesel) fuel and electricity. By adding battery power to the vehicle, it is possible to reduce the size of the vehicle's internal combusion engine. This results in reduced emissions, reduced noise, and increased fuel economy.

The batteries stay charged by an electrical generator powered by the diesel engine. This type of bus is not unlike the thousands of hybrid electric automobiles currently on the road today.

The hybrid electric vehicle is considered to be one of the most promising technologies for air pollution reductions until zero emission fuel cell technology is developed. Fuel cells are anticipated to be available for transit vehicles within the next 10 to 20 years.

What is biodiesel fuel?

The term *biodiesel* has been used for decades. It typically refers to fuels derived from biologically based vegetable oils (e.g., rapeseed, palm tree, olive, peanut, soy bean, safflower, sunflower, castor), recycled cooking grease, or animal fats, all of which are suitable for use in compression-ignition internal combustion engines.

Biodiesel is typically produced through the reaction of a vegetable oil or animal fat with methanol. It comes in various blends, but most consumers use a blend which consists of 20% biodiesel and 80% standard No. 2 diesel fuel.

When will the new fleet begin operation?

The National Park Service is committed to issuing a purchase contract by early 2003. Manufacturing takes up to 2 years after the purchase agreement is made. This puts the new buses in the park toward the end of 2004.

How can the public get involved?

Public participation in the planning process is critical. Here are some ways to stay involved in the Yosemite Valley Shuttle Bus Procurement Project:

- Submit your written comments and concerns (see box below). The project team will consider your ideas with other team members and park management.
- Add your name to the Planning mailing list to receive the *Planning Update* newsletter, a periodic publication that announces the latest developments in ongoing park improvement projects.
- This and other park improvement projects will be periodically updated on the park's planning web site: *www.nps.gov/yose/planning/*

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